

ABSTRACT

The present invention provides various processes for producing light olefins from methanol and ethanol, optionally in a mixed alcohol stream. In one embodiment, the invention includes directing a first syngas stream to a methanol synthesis zone to form methanol and directing a second syngas stream and methanol to a homologation zone to form ethanol. The methanol and ethanol are directed to an oxygenate to olefin reaction system for conversion thereof to ethylene and propylene.